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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,077	03/01/2002	Kiyoshi Kobayashi	0033-0794P	9133

2292 7590 07/09/2004

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EXAMINER
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HWANG, JOON H

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 07/09/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/085,077

Applicant(s)

KOBAYASHI ET AL.

Examiner

Joon H. Hwang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. The pending claims are 1-13.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-10 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Guturu et al. (U.S. Patent No. 6,581,075).

With respect to claim 1, Guturu discloses database storing means for storing a first database (fig. 1, fig. 8, abstract, and line 50 in col. 1 thru line 10 in col. 3). Guturu discloses performing consistency maintaining processes by replacing data of the first database with data of a second database different from the first database concerning consistency maintaining means (line 50 in col. 1 thru line 10 in col. 3). Guturu discloses an updated record with an updated timestamp representing time when a last consistency maintaining process was performed (line 50 in col. 1 thru line 10 in col. 3, fig. 6, fig. 2, and lines 15-20 in col. 5), which teaches consistency maintaining process time information. Guturu discloses designating as data of which consistency is to be maintained between the first and second databases, data included in the first database

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and having modification time newer than the time of the last consistency maintaining process, based on the timestamp teaching consistency maintaining process time information, and based on data modification time information corresponding to each data included in the first database and representing time when each the data is modified (line 50 in col. 1 thru line 10 in col. 3, lines 33-53 in col. 4, lines 27-41 in col. 5, lines 3-28 in col. 6, and line 17 in col. 7 thru line 35 in col. 8).

With respect to claim 2, Guturu teaches storing the consistency maintaining process time information concerning time information storing means (line 50 in col. 1 thru line 10 in col. 3).

With respect to claim 3, Guturu teaches obtaining the consistency maintaining process time information from another information management apparatus storing the second database concerning time information obtaining means (line 50 in col. 1 thru line 10 in col. 3, fig. 1, fig. 8, and line 17 in col. 7 thru line 35 in col. 8).

With respect to claim 4, Guturu discloses transmitting the data to another information management apparatus storing the second database concerning data transmitting means connected to the data determining means (fig. 8 and lines 53-67 in col. 3).

With respect to claim 5, Guturu teaches means for receiving data transmitted as the data of which consistency is maintained from another information management apparatus storing the second database and means for replacing data corresponding to the received data included in the first database with the received data (line 50 in col. 1 thru line 10 in col. 3 and line 17 in col. 7 thru line 35 in col. 8).

With respect to claim 6, Guturu teaches database designating means for designating, among a plurality of stored databases, the first database as an object of the consistency maintaining process (fig. 1, fig. 8, line 50 in col.1 thru line 10 in col. 3, lines 53-67 in col. 3, and line 17 in col. 7 thru line 35 in col. 8).

The limitations of claim 7 are rejected in the analysis of claim 1 above, and the claim is rejected on that basis.

With respect to claim 8, the limitations of claim 8 are similar to the limitations of claim 1. Guturu further discloses two or more databases different from the first database and determining an order of two or more databases as the object with which consistency of the designated data is to be maintained, in accordance with a predetermined priority, concerning database determining means (fig. 1, fig. 8, line 50 in col.1 thru line 10 in col. 3, lines 53-67 in col. 3, and line 17 in col. 7 thru line 35 in col. 8). Therefore, the limitations of claim 8 are rejected in the analysis of claim 1 above, and the claim is rejected on that basis.

With respect to claim 9, Guturu teaches means for determining order of the two or more databases as the object of maintaining consistency of the determined data, in accordance with priority represented as an order of time starting from older or newer one, of the consistency maintaining process, represented by the consistency maintaining process time information (line 50 in col. 1 thru line 10 in col. 3 and line 17 in col. 7 thru line 35 in col. 8).

With respect to claim 10, Guturu discloses storing the priority concerning priority storing means and means for determining the order of the two or more databases as an

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object with which consistency of the determined data is to be maintained, in accordance with the priority stored in the priority storing means (fig. 1, fig. 6, line 50 in col. 1 thru line 10 in col. 3, and line 17 in col. 7 thru line 35 in col. 8).

The limitations of claim 13 are rejected in the analysis of claim 8 above, and the claim is rejected on that basis.

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guturu et al. (U.S. Patent No. 6,581,075) in view of Thorne (U.S. Patent No. 6,047,289).

With respect to claim 11, Guturu discloses communication means for communicating with apparatuses respectively storing the two or more databases and means for determining an order of the two or more databases as the object with which consistency of the determined data is to be maintained. Guturu does not explicitly disclose time point storing means for storing a time point at which communication by the communication means becomes possible. However, Thorne discloses defining scheduling conditions for synchronizing information between a master and slave computers, wherein each slave computer can have different scheduling conditions for the synchronization (lines 16-51 in col. 10 and figs. 3-4). Therefore, based on Guturu in view of Thorne, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Thorne to the system of Guturu in order to synchronize information in a database based on the scheduling conditions.

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5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guturu et al. (U.S. Patent No. 6,581,075) in view of Thorne (U.S. Patent No. 6,047,289), and further in view of Berkowitz et al. (U.S. Patent No. 6,529,921).

With respect to claim 12, Guturu and Thorne disclose the claimed subject matter as discussed above except holding means for holding a state in which communication with a second apparatus other than the first apparatus among the two or more apparatuses is possible. However, Berkowitz discloses locking a database and/or network protocol for synchronization (lines 31-44 in col. 1, line 66 in col. 11 thru line 23 in col. 12, lines 26-58 in col. 14, line 26 in col. 17 thru line 18 in col. 18) in order to protect data consistency. This locking teaches holding the communication of the second apparatus. Therefore, based on Guturu in view of Thorne, and further in view of Berkowitz, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Berkowitz to the system of Guturu for locking the database in order to protect data consistency.

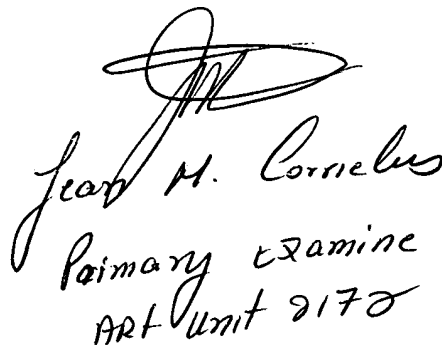
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 703-305-6469. The examiner can normally be reached on 9:30-6:00(M~F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joon Hwang  
6/25/04



Jean M. Corrieus  
Primary Examiner  
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